



**Ruckus ZoneDirector Configuration Guide** The power to know your customers is the power to grow your business.

# Ruckus ZoneDirector Configuration Guide

## Zenreach Overview

Zenreach provides consumers with an amazing WiFi experience at their favorite spots, while helping to grow local businesses by better engaging and targeting their customers. By offering a branded captive portal for your guest WiFi network, customers are given the ability to opt-in to targeted messaging sent using the Zenreach platform.

## Zenreach Configuration

All operations within this documentation are performed under the Configure tab of the ZoneDirector web interface.

In order to associate your Ruckus access point(s) with your business information, Zenreach will need the MAC address of each individual access point that will be broadcasting the integrated guest SSID. **Copy all MAC addresses and forward it to your Zenreach Account Manager.** Without completion of this step, guests will receive a "404" error on the captive portal.

## Configure AAA

- Step 1      Navigate the the **AAA Servers** page via the sidebar.
- Step 2      Click **Create New** to create a new **AAA server profile**.
- Step 3      Enter the following configuration for the new profile:  
**Name:** Zenreach  
**AuthType:** RADIUS  
**Encryption:** TLS Unchecked  
**Auth Method:** PAP  
**Backup RADIUS:** Checked  
  
**First Server:**  
IP Address: 54.69.8.147  
Port: 1812  
Secret: 8fc40973252c42e196489d4a16849ff8  
  
**Second Server:**  
IP Address: 54.68.29.80  
Port: 1812  
Secret: 8fc40973252c42e196489d4a16849ff8
- Step 4      Click **OK**.
- Step 5      Click **Create New** to create another new AAA server profile.

Step6

Enter the following configuration for the new profile:  
**Name:** Zenreach  
**AcctType:** RADIUS Accounting  
**Encryption:** TLS Unchecked  
**Backup RADIUS:** Checked

**First Server:**  
IP Address: 54.69.8.147  
Port: 1813  
Secret: 8fc40973252c42e196489d4a16849ff8

**Second Server:**  
IP Address: 54.68.29.80  
Port: 1813  
Secret: 8fc40973252c42e196489d4a16849ff8

Step 7

Click **OK**.

The following image shows the configured AAA profiles:

Editing (Zenreach Stag)

Name	Zenreach
Type	<input type="radio"/> Active Directory <input type="radio"/> LDAP <input checked="" type="radio"/> RADIUS <input type="radio"/> RADIUS Accounting <input type="radio"/> TACACS+
Encryption	<input type="checkbox"/> TLS
Auth Method	<input checked="" type="radio"/> PAP <input type="radio"/> CHAP
Backup RADIUS	<input checked="" type="checkbox"/> Enable Backup RADIUS support
First Server	
IP Address*	54.69.8.147
Port*	1812
Shared Secret*	.....
Confirm Secret*	.....
Second Server	
IP Address*	54.68.29.80
Port*	1812
Shared Secret*	.....
Confirm Secret*	.....

Editing (ZenreachStagAcct)

Name	ZenreachAcct
Type	<input type="radio"/> Active Directory <input type="radio"/> LDAP <input type="radio"/> RADIUS <input checked="" type="radio"/> RADIUS Accounting <input type="radio"/> TACACS+
Encryption	<input type="checkbox"/> TLS
Backup RADIUS	<input checked="" type="checkbox"/> Enable Backup RADIUS Accounting support
First Server	
IP Address*	54.69.8.147
Port*	1813
Shared Secret*	.....
Confirm Secret*	.....
Second Server	
IP Address*	54.68.29.80
Port*	1813
Shared Secret*	.....
Confirm Secret*	.....

Configure AAA

Step 1

Navigate to the **Hotspot Services** page via the sidebar.  
Click **Create New** to create a new hotspot profile.

Step 2

Enter the following configuration for the new profile:  
**Name:** Zenreach

Step 3

**Redirection**  
WISPr Smart Client Support: None  
Login Page: https://gateway.wifast.com/ruckus/zonedirector/  
Start Page: "redirect to the following URL:"  
https://gateway.wifast.com/ruckus/online/

**User Session**  
Session Timeout: 1440 minutes  
Grace Period: 60 minutes  
  
**Authentication/Accounting Servers**  
Authentication Server: ZenreachAuth  
Accounting Server: ZenreachAcct  
Send Interim-Update: every 1 minute

Step 4

**Walled Garden**  
Walled Garden: gateway.wifast.com

Step 5

Click **OK**.

The following image shows a configured hotspot profile:

Editing (Zenreach)

Name

Zenreach

Redirection

WISPr Smart Client Support

☒ None

☐ Enabled

☐ Only WISPr Smart Client allowed

Login Page\*

Redirect unauthenticated user to  
https://gateway.wifast.com/ruckus/zonedirector/ for authentication.

Start Page

After user is authenticated,  

☐ redirect to the URL that the user intends to visit.

☒ redirect to the following URL: https://gateway.wifast.com/ruckus/online/

User Session

Session Timeout

☒ Terminate user session after 1440 minutes

Grace Period

☒ Allow users to reconnect with out re-authentication for 60 minutes

Authentication/Accounting Servers

Authentication Server

ZenreachProdAuth

☐ Enable MAC authentication bypass(no redirection).

Accounting Server

ZenreachProdAcct

Send Interim-Update every 1 minutes

Wireless Client Isolation

☐ Isolate wireless client traffic from other clients on the same AP.

☐ Isolate wireless client traffic from all hosts on the same VLAN/subnet.  

No WhiteList

(Requires whitelist for gateway and other allowed hosts.)

Location Information

Walled Garden

Unauthenticated users are allowed to access the following destinations:  
(e.g. \*.mydomain.com,mydomain.com, \*.mydomain.\*,192.168.1.1:80, 192.168.1.1/24 or 192.168.1.1:80/24)

<input type="checkbox"/>	Order	Destination Address	Action
<input type="checkbox"/>	1	gateway.wifast.com	<a href="#">Edit</a> <a href="#">Clone</a>
<input type="checkbox"/>	2	*.facebook.com	<a href="#">Edit</a> <a href="#">Clone</a>
<input type="checkbox"/>	3	*.facebook.net	<a href="#">Edit</a> <a href="#">Clone</a>
<input type="checkbox"/>	4	*.fbcdn.net	<a href="#">Edit</a> <a href="#">Clone</a>
<input type="checkbox"/>	5	*.akamaihd.net	<a href="#">Edit</a> <a href="#">Clone</a>
<input type="checkbox"/>	6	*.twitter.com	<a href="#">Edit</a> <a href="#">Clone</a>
<input type="checkbox"/>	7	*.twimg.com	<a href="#">Edit</a> <a href="#">Clone</a>

[Create New](#) [Delete](#)

Restricted Subnet Access

Advanced Options

OK

Cancel

## Configure WLAN

Step 1 Navigate to the **WLANs** page via the sidebar.

Step 2 Click **Edit** for the WLAN you wish to enable  
Zenreach hotspot support on.

Step 3 Click **Advanced Options**.

Enter the following configuration options:

### WLAN Usages

Type: Hotspot Service (WISPr)

### Authentication Options

Method: Open

### Encryption Options

Method: None

### Options

Hotspot Services: Zenreach

Priority: High

Step 4 **Advanced Options**  
Inactivity Timeout: 60 minutes

Step 5 Click **OK**.

The following image shows a configured WLAN:

**Advanced Options**

**Access Control**

L2/MAC: No ACLs   
Device Policy: None   
Precedence Policy: Default   
☐ Enable Role based Access Control Policy

**Application Visibility**

☐ Enable

**Call Admission Control**

☐ Enforce CAC on this WLAN when CAC is enabled on the radio

**Rate Limiting**

Uplink: Disabled   
Downlink: Disabled   
(Per Station Traffic Rate)

**Multicast Filter**

☐ Drop multicast packets from associated clients

**VLAN Pooling**

VLAN Pools List: None    
(When set VLAN Pooling, Must disable device policy)

**Access VLAN**

VLAN ID: 1 ☐ Enable Dynamic VLAN

**Hide SSID**

☐ Hide SSID in Beacon Broadcasting (Closed System)

**Tunnel Mode**

☐ Tunnel WLAN traffic to ZoneDirector  
(Recommended for VoIP clients and PDA devices.)

**Proxy ARP**

☐ Enable Proxy ARP

**Background Scanning**

☐ Do not perform background scanning for this WLAN service.  
(Any radio that supports this WLAN will not perform background scanning)

**Load Balancing**

☐ Do not perform client load balancing for this WLAN service.  
(Applies to this WLAN only. Load balancing may be active on other WLANs)

**Band Balancing**

☐ Do not perform Band Balancing on this WLAN service.  
(Applies to this WLAN only. Band Balancing might be enabled on other WLANs)

**Max Clients**

Allow only up to 100 clients per AP radio to associate with this WLAN

**802.11d**

☒ Support for 802.11d (only applies to radios configured to operate in 2.4 GHz band)

**DHCP option 82**

☐ Enable DHCP Option 82

**Force DHCP**

☐ Enable Force DHCP, disconnect client if client does not obtain valid IP in 10 seconds.

**Client Tx/Rx Statistics**

☐ Ignore unauthorized client statistics

**Client Fingerprinting**

☒ Enable Client Fingerprinting

**Service Schedule**

☒ Always on ☐ Always off ☐ Specific

**Inactivity Timeout**

Terminate idle user session after 60 minutes of inactivity

**Radio Resource Management**

☐ Enable 802.11k Neighbor-list Report

## Walled Garden for Social Login

A walled garden is a list of websites whitelisted for access before the user is authenticated. Prior to enabling the Social Login feature, the walled garden will need to be configured for each of the respective social network.

### Facebook and Twitter

Add the following entries to the **Walled Garden** section of the WiFi network's **Hotspot Services** page:

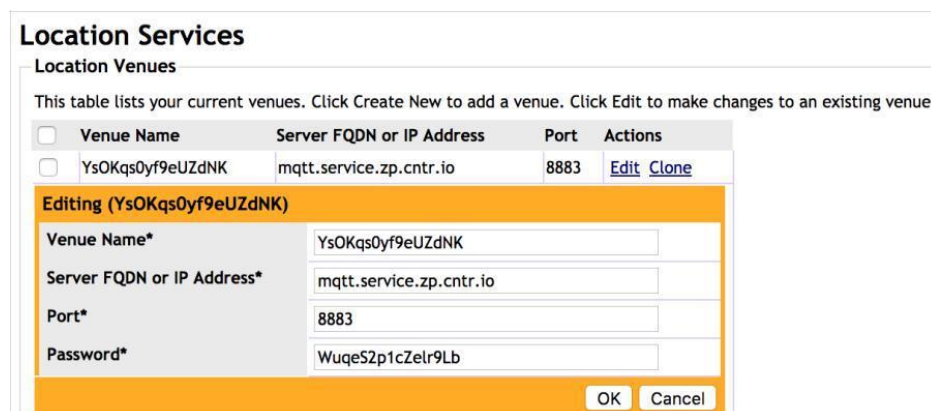
\*.facebook.com  
\*.facebook.net  
\*.fbcdn.net  
\*.akamaihd.net  
\*.twitter.com  
\*.twimg.com



## Configure Location Services

- Step 1 Navigate to **Location Services** in the left sidebar.
- Step 2 Click **Create New**.
- Step 3 Enter the following configuration options:  
**Venue Name:** [Touch base with your Zenreach Account Manager to get receive this unique value]
- Step 4 **Server FQDN or IP Address:** mqtt.service.zp.cntn.io  
**Port:** 8883  
**Password:** [Touch base with your Zenreach Account Manager to get receive this unique value]
- Step 5 Click **OK**.

The following image shows a configured hotspot profile:



You will need to allow traffic on TCP port 8883 for location services to work. Please ensure any firewalls you have are updated to allow this traffic.

**Note:** Occasionally, ZD will auto-delete the last character of the "Venue Name" after being entered in and saved for the first time. [In the example above, the capital letter "K" may disappear after being initially saved.] Please be sure to refresh the page, and re-enter in that character if you experience this issue.

### Enable Location Services

- Step 1 Go to **Access Points** in the left navigation bar
- Step 2 Click **Edit** on the Access Point Group associated with your Zenreach APs
- Step 3 Click the **Enable** checkbox under **Location Services**
- Step 4 Select the Venue Name in the pull-down menu under **Location Services** that you created in the **Location Services** settings previously
- Step 5 Click **OK**.

Without completion of this step, Zenreach will not receive the necessary location data associated with connecting clients on the network.

#### Access Point Groups

This table lists your current AP groups and provides basic details about them. Click Create New to add another AP group, or click Edit to make changes

Name	Description	# of Members	Actions
<input type="checkbox"/> System Default	System default group for Access Points	1	<a href="#">Edit</a> <a href="#">Clone</a>

#### Editing (System Default)

Name

System Default

Description

System default group for Access Points

#### Channel Range Settings

Radio B/G/N(2.4G)

☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☒ 7 ☐ 8 ☐ 9 ☐ 10 ☒ 11

Radio A/N/AC(5G) Indoor

☐ 36 ☐ 40 ☐ 44 ☐ 48 ☒ 52 ☐ 56 ☐ 60 ☐ 64 ☒ 100 ☐ 104 ☐ 108 ☐ 112 ☐ 132 ☐ 136 ☒ 149 ☐ 153 ☐ 157 ☐ 161

Radio A/N/AC(5G) Outdoor

☒ 52 ☐ 56 ☐ 60 ☐ 64 ☒ 100 ☐ 104 ☐ 108 ☐ 112 ☐ 132 ☐ 136 ☒ 149 ☐ 153 ☐ 157 ☐ 161

#### Radio Settings

Radio B/G/N (2.4 GHz)

Radio A/N/AC (5.0 GHz)

Channelization

Auto

Auto

Channel

Auto

Indoor Auto Outdoor Auto

TX Power

Auto

Auto

11n/ac only Mode

Auto

Auto

WLAN Group

Default

Default

Call Admission Control

OFF

OFF

SpectraLink Compatibility

Disable

Disable

WLAN Service

Enable

Enable

#### Network Setting

IP Mode

IPv4 and IPv6

#### Location Services

Enable/Disable

☒ Enable

Venue Name\*

greenfieldruckus

Model Specific Control

zf7055

Max Clients

Allow Max 100 clients to associate with this AP

Status LEDs

☐ Disable Status LEDs

Port Setting

Edit Port Setting

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For questions or comments about this integration guide, please contact [partners@zenreach.com](mailto:partners@zenreach.com).